

DETAILED ACTION

Response to Amendment

Applicant verified that the set of claims in CHII – Amendment to the claims – PCT Art. 34 submitted on 07/20/2006 is the preliminary amendment and, therefore, substitutes the original claims filed 07/20/2006. By this Office Action, Examiner respectfully withdraws the Office Action mailed 07/20/2009.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 24-25 and 31-38 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 24-25 and 31-38 recite “a method for recording data,” which is claiming to claim a process without setting forth any steps involved in the process. Therefore, the claims generally raise an issue of indefiniteness under **35 U.S.C. 112**, second paragraph. The claims held to be indefinite because it merely recites a use without any active, positive steps delimiting how this use is actually practiced. *Ex parte Erlich*, 3 USPQ2d 1011 (Bd. Pat. App. & Inter. 1986) (see MPEP 2173.05(q)).

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 24-25 and 31-38 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

MPEP 2173.05(q) reads:

In *Ex parte Dunki*, 153 USPQ 678 (Bd. App. 1967), the Board held the following claim to be an improper definition of a process: "The use of a high carbon austenitic iron alloy having a proportion of free carbon as a vehicle brake part subject to stress by sliding friction." In *Clinical Products Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966), the district court held the following claim was not a proper process claim under **35 U.S.C. 101**: "The use of a sustained release therapeutic agent in the body of ephedrine absorbed upon polystyrene sulfonic acid."

Although a claim should be interpreted in light of the specification disclosure, it is generally considered improper to read limitations contained in the specification into the claims. See *In re Prater*, 415 F.2d 1393, 162 USPQ 541 (CCPA 1969) and *In re Winkhaus*, 527 F.2d 637, 188 USPQ 129 (CCPA 1975), which discuss the premise that one cannot rely on the specification to impart limitations to the claim that are not recited in the claim.

Claims 24-25 and 31-38 are rejected under 35 U.S.C. 101 because the claims recite a method or process without setting forth any steps involved in the process. Since the claims 24-25 do not set forth any steps involved in the process, they are not proper process claims thus do not fall within a statutory category of invention because the claimed subject matter is not limited to a process, machine, manufacture, or a composition of matter.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 2-8, 17-24, 26-28, and 30-38 are rejected under 35 U.S.C. 102(b) as being anticipated by Ando et al. (US Patent 6,341,196 – hereinafter Ando).

Regarding claim 2, Ando discloses a method for recording data, comprising: recording management data in a first file (*Fig. 13A or RTR_VMG in Fig. 25*); recording n ($n > 2$) kinds of streams in a second file (*Fig. 13A; Fig. 24 – in Fig. 24, the Examiner interprets the DVD_RTR Directory as a second file, in which the streams for movie video, still picture video, still picture-added audio streams, and other streams are stored; or column 31, lines 36 – each stream corresponds to at least a VOB and distinguished from each other at least by search pointers*), the streams being distinguished from each other, depending on the presence and type of a time map showing a relationship between time and recording position, by a predetermined process (*Fig. 13A; Fig. 24; Fig. 25 ; column 33, lines 1-7, 23-28 – in Fig. 24, the Examiner interprets the DVD_RTR Directory as a second file, in which the streams for movie video, still picture video, still picture-added audio streams, and other streams are store - and each stream is distinguished from the other by at least the naming process via which each stream can be distinguished by the names of RTR_MOV.VRO, RTR_STO.VRO, RTR_STA.VRO etc.; or column 31, lines 36-67 – each stream corresponds to at least a VOB and*

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distinguished from each other at least by search pointers – in Fig. 25, the RTR_MOV.VRO does have a time map or a time map is present in RTR_MOV.VRO while at least in RTR_STO.VRO it is not the case, also the time map does have a specific structure or the time map does have a structural type); and arranging flags in the first file, flags being used for distinction of n kinds of streams recorded in the second file (Fig. 13A; Fig. 15; column 18, lines 1-15 – the streams have their corresponding entries, which have information to tell them apart; or column 31, lines 36 – each stream corresponds to at least a VOB and distinguished from each other at least by search pointers).

Regarding claim 3, Ando discloses a method for recording data, comprising: recording management data in a first file (Fig. 13A); recording n kinds of streams in other files such that first, second, third and nth streams are recorded in second, third and (n+1)th files, respectively (Fig. 13A; Fig. 24; Fig. 25; column 33, lines 1-7, 23-28 – in Fig. 24, the Examiner interprets each of RTR_MOV.VRO, RTR_STO.VRO, RTR_STA.VRO etc. as a separate file respectively to record the streams for movie video, still picture video, still picture-added audio streams, and other streams), the streams being distinguished from each other, depending on the presence and type of a time map showing a relationship between time and recording position, by a predetermined process (Fig. 13A; Fig. 24 – in Fig. 24, the Examiner interprets each of RTR_MOV.VRO, RTR_STO.VRO, RTR_STA.VRO etc. as a separate file respectively to record the streams for movie video, still picture video, still picture-added audio streams, and other streams - and each stream is distinguished from the other by at least

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the naming process via which each stream can be distinguished by the names of RTR_MOV.VRO, RTR_STO.VRO, RTR_STA.VRO etc. – in Fig. 25, the RTR_MOV.VRO does have a time map or a time map is present in RTR_MOV.VRO while at least in RTR_STO.VRO it is not the case, also the time map does have a specific structure or the time map does have a structural type); and arranging flags in the first file, the flags being used for distinction of the n kinds of streams (Fig. 13A; Fig. 15; column 18, lines 1-15 – the streams have their corresponding entries, which have information to tell them apart).

Regarding claim 4, Ando discloses a method for recording data, comprising: recording management data in a first file (Fig. 13A); recording n kinds of streams in second to (m+1)th ($m \geq 2$) files, respectively (Fig. 13A; Fig. 24; Fig. 25 ; column 33, lines 1-7, 23-28 – in Fig. 24, the Examiner interprets each of RTR_MOV.VRO, RTR_STO.VRO, RTR_STA.VRO etc. as a separate file respectively to record the streams for movie video, still picture video, still picture-added audio streams, and other streams), the streams being distinguished from each other, depending on the presence and type of a time map showing a relationship between time and recording position, by a predetermined process (Fig. 13A; Fig. 24 – in Fig. 24, the Examiner interprets each of RTR_MOV.VRO, RTR_STO.VRO, RTR_STA.VRO etc. as a separate file respectively to record the streams for movie video, still picture video, still picture-added audio streams, and other streams - and each stream is distinguished from the other by at least the naming process via which each stream can be distinguished by the names of RTR_MOV.VRO, RTR_STO.VRO, RTR_STA.VRO etc. – in Fig. 25, the

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RTR_MOV.VRO does have a time map or a time map is present in RTR_MOV.VRO while at least in RTR_STO.VRO it is not the case, also the time map does have a specific structure or the time map does have a structural type); and arranging flags in the first file, the flags being used for distinction of the n kinds of streams (Fig. 13A; Fig. 15; column 18, lines 1-15 – the streams have their corresponding entries, which have information to tell them apart).

Regarding claim 5, Ando also discloses time-map-containing streams are set to first to kth ($k \geq 1$, $k \leq n-1$) streams (column 31, lines 36-67 – each stream corresponds to at least a VOB), time-map-free streams are set to (k+1)th to nth streams (Fig. 24 – streams of computer data – there is no time-map in streams of computer data), and time maps related to the first to kth streams are recorded in the first file or a third file (column 32, lines 59-61).

Regarding claim 6, Ando also discloses wherein when $n=2$ and $k=1$, a time-map-containing stream is set to a first stream (column 31, lines 36-67 – each stream corresponds to at least a VOB - any of these streams is set to a first stream) and a time-map-free stream is set to a second stream (Fig. 24 – any of the computer data stream can be set to a second stream).

Regarding claim 7, Ando also discloses wherein time-map-containing streams are set to first to kth streams (Fig. 25 – the stream *RTR_MOV.VRO* – with $k=0$), time-map-free streams are set to (k+1)th to nth streams (Fig. 25 – the streams *RTR_STO.VRO* or *RTR_STA.VRO* – with $k=0$), and time maps related to the first to kth streams are recorded in the first file or an (n+2)th file (related Time Map is recorded in

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Navigation Data RTR_VMG Fig. 23H, which is stored in the file RTR.IFO shown in Fig. 24).

Regarding claim 8, wherein time-map-containing streams are set to first to kth streams (*Fig. 25 – the stream RTR_MOV.VRO – with $k=0$*), time-map-free streams are set to (k+1)th to nth streams (*Fig. 25 – the streams RTR_STO.VRO or RTR_STA.VRO – with $k=0$*), and time maps related to the first to kth streams are recorded in the first file or an (m+2)th file (*related Time Map is recorded in Navigation Data RTR_VMG Fig. 23H, which is stored in the file RTR.IFO shown in Fig. 24*).

Regarding claim 17, Ando also discloses a stream whose time information is described in the management data is set to a first stream (*Fig. 25; column 32, lines 59-61*) and a stream whose time information is not described in the management data is set to a second stream (*Fig. 24 - computer data is set to second stream – there is no time information of computer data described in the any management data described above*).

Regarding claim 18, Ando also disclose the time information is PTS (Presentation Time Stamp) (*column 32, lines 59-61*).

Regarding claim 19, Ando also discloses the stream formats of first and second streams are known (*column 13, lines 41-57*).

Regarding claim 20, Ando also discloses wherein details on a video, audio, or data format of each of the first and second streams are known (*column 13, lines 41-57; Fig. 22*).

Regarding claim 21, Ando also discloses a stream whose stream format is unknown is recorded in another file (*Fig. 24; computer data are stored in a different subdirectory, which is interpreted by the Examiner as another file*).

Regarding claim 22, Ando also discloses wherein a stream whose details on a video, audio, or data format are unknown is recorded in another file (*Fig. 24; computer data are stored in a different subdirectory, which is interpreted by the Examiner as another file*).

Regarding claim 23, Ando also discloses a stream transmitted by storage broadcasting is set to a second stream (*column 13, lines 41-57—sub-picture stream*).

Regarding claim 24, Ando discloses a method for recording data (*column 13, lines 41-67; column 14, lines 59-65*), wherein management data includes a part or all of stream-format identification information, a flag indicating whether the corresponding stream is a 1-PMT partial TS or another TS, the number of PMTs, the number of multiplexed channels in the other TS, and TS-format configuration information (*at least in Fig. 23E, "Movie AV File Information Table" and "Still Picture AV File Information Table" are information that can identify the formats of the corresponding streams as "movie format" and "still picture format"*), and also includes every channel a part or all of broadcasting-station information, a moving-picture data compression standard, an audio data compression standard, a still-picture data compression standard, an animation data compression standard, a flag indicating the presence or absence of a time map, a flag indicating the presence or absence of time information, and a flag indicating whether the corresponding stream is a standard broadcast stream or a storage

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broadcast stream (*at least in column 13, lines 41-48 – moving-picture data compression standard and audio data compression standard is inherently disclosed in order to decompress the data correctly according to either MPEG-2 or MPEG-1 for video data and either MPEG or AC-3 audio data during playback*).

Claim 26 is rejected for the same reasons as discussed in claims 2-4 above.

Claim 27 is rejected for the same reasons as discussed in claims 2-4 above.

Regarding claim 28, Ando discloses a method for recording data such that a plurality of streams or channels are simultaneously recorded (*column 13, lines 41-67; column 14, lines 59-65*), the method comprising: recording each stream in a file as a first stream whose relationship between time and recording position is recorded (*Fig. 20; column 23, lines 26-49 – in file RWVIDEO_OBJECT.VOB*) or a second stream whose relationship therebetween is not recorded (*column 25, lines 18-30 – either in RWPICTURE_OBJECT.POB or RWTHUMBNAI_OBJECT.POB*); and recording management data for distinction of the first and second streams in another file (*Fig. 13A and Fig. 15*).

Regarding claim 30, Ando discloses a method for recording data (*column 13, lines 41-67; column 14, lines 59-65*), comprising: recording management data in a first file (*Fig. 13A and Fig. 15 or "Navigation Data RTR_VMG in Figs. 23*); setting one or more time-map-containing streams to first to kth ($k \geq 1$, $k \leq n-1$) streams and recording the streams in second and subsequent files, respectively (*Fig. 20; column 23, lines 26-49 – in file RWVIDEO_OBJECT.VOB or Fig. 25 in file RTR_MOV.VRO*), each stream certainly containing a time map (*Fig. 20; column 23, lines 26-49 or Fig. 25, in which*

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RTR_MOV.VRO has a time map); and setting one or more unrestricted streams to (k+1)th to nth streams and recording the streams in another or other files, respectively (*Fig. 25 – RTR_STO.VRO and RTR_STA.VRO do not have a time map or column 25, lines 18-30 –in files RWPICTURE_OBJECT.POB or RWTHUMBNAI_OBJECT.POB or RWAUDIO_OBJECT.AOB*).

Regarding claim 31, Ando discloses a method for recording data, wherein management data is recorded in a first file (*Fig. 13A or RTR_VMG in Fig. 25*); each unrestricted stream is regarded as any one type of a time-map- containing stream, a table-containing stream which contains a table showing the relationship between arrival time and recording address of the broadcast stream, and a table-free stream which does not contain a table showing the relationship between time and recording address (*Fig. 25 – RTR_STO.VRO and RTR_STA.VRO do not have a time map or column 25, lines 18-30 –in files RWPICTURE_OBJECT.POB or RWTHUMBNAI_OBJECT.POB or RWAUDIO_OBJECT.AOB; column 33, lines 1-7, 23-28*), and a flag indicating the type is recorded separately (*Fig. 15 – “File Characteristics Indicating Type of File”; Fig. 16 – “ICB Tag Indicating Type of File”*).

Regarding claim 32, Ando discloses a method for recording data, wherein management data is recorded in a first file (*Fig. 13A or RTR_VMG in Fig. 25*); each unrestricted stream is divided into predetermined stream segments (*Fig. 25 – wherein each segment corresponds to at least a VOB or a VOB*) and each segment is regarded as any one type of a time-map-containing stream segment, a table-containing stream segment which contains a table showing the relationship between arrival time

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and recording address-of the broadcast stream segment, and a time-map-free table-free stream segment which does not contain either of the time map and the table (*Fig. 25 – wherein each segment corresponds to at least a VOB or a VOB – each segment in the stream RTR_MOV.VRO is regarded as at least a time-map-containing stream segment – each segment in either RTR_STO.VRO or RTR_STA.VRO streams is regarded at least as time-map-free table-free stream segment; column 33, lines 1-7, 23-28*), and a flag indicating the type is recorded separately (*Fig. 15 – “File Characteristics Indicating Type of File”; Fig. 16 – “ICB Tag Indicating Type of File”*).

Regarding claim 33, Ando also discloses wherein each flag is recorded in the first file (*Fig. 15; Fig. 16*).

Regarding claim 34, Ando discloses a method for recording data, wherein management data is recorded in a first file (*Fig. 13A or RTR_VMG in Fig. 25*); each unrestricted stream is regarded as any one type of a table- containing stream, which contains a table showing the relationship between arrival time and recording address of the broadcast stream, and a table-free stream, which does not contain a table showing the relationship between time and recording address (*Fig. 25 – RTR_STO.VRO and RTR_STA.VRO do not have a table or column 25, lines 18-30 –in files RWPICTURE_OBJECT.POB or RWTHUMBNAIL_OBJECT.POB or RWAUDIO_OBJECT.AOB; column 33, lines 1-7, 23-28*), and a flag indicating the type is recorded separately (*Fig. 15 – “File Characteristics Indicating Type of File”; Fig. 16 – “ICB Tag Indicating Type of File”*).

Regarding claim 35, Ando discloses a method for recording data, wherein management data is recorded in a first file (*Fig. 13A or RTR_VMG in Fig. 25*); each unrestricted stream is divided into predetermined stream segments and each segment is regarded as any one type of a table-containing stream segment, which contains a table showing the relationship between arrival time and recording address of the broadcast stream segment, and a time-map-free table-free stream segment, which does not contain either of the time map and the table (*Fig. 25 – wherein each segment corresponds to at least a VOB or a VOB– each segment in either RTR_STO.VRO or RTR_STA.VRO streams is regarded at least as time-map-free table-free stream segment; column 33, lines 1-7, 23-28*), and a flag indicating the type is recorded separately (*Fig. 15 – “File Characteristics Indicating Type of File”; Fig. 16 – “ICB Tag Indicating Type of File”*).

Regarding claim 36, Ando also discloses each flag is recorded in the first file (*Fig. 15; Fig. 16*).

Regarding claim 37, Ando also discloses wherein a time map or a table related to each unrestricted stream is recorded in the first file or another file, which is not disclosed in Claims 30, 31, or 34 (*Fig. 20; column 23, lines 45-49; Fig. 23H – “Time Map Information” in RTR.IFO (Navigation Data RTR_VMG)*).

Regarding claim 38, Ando also discloses wherein a time map related to each time-map containing stream and a table related to each unrestricted stream are recorded in the first file or another file, which is not disclosed in Claim 30 (*Fig. 20*;

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column 23, lines 45-49; Fig. 23H – “Time Map Information” in RTR.IFO (Navigation Data RTR_VMG).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ando et al. (US Patent 6,341,196 – hereinafter Ando) as applied to claims 1-8, 17-24, and 26-40 above.

Regarding claim 25, Ando also discloses wherein MPEG video, H.264 video, or Windows (registered trademark) Media video is shown as the moving-picture data compression standard (*column 13, lines 41-44*), MPEG audio, Dolby audio, or DTS audio is shown as the audio data compression standard (*column 13, lines 45-48*).

Ando does not disclose JPEG or PNG is shown as the still picture data compression standard.

JPEG or PNG as still picture data compression standard is well known in the art. Thus, Official Notice is taken.

One of ordinary skill in the art at the time the invention was made would have been motivated to incorporate the still picture data compression standard of JPEG or PNG into the recording method disclosed by Ando in order to make the method compatible with existing popular standards.

Claims 9-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ando et al. (US Patent 6,341,196 – hereinafter Ando) as applied to claims 1-8, and 17-40 above, and further in view of Naimpally (US Patent 5,619,337).

Regarding claim 9, see the teachings of Ando as discussed in claim 2 above. Ando also discloses is set to a first stream (*Fig. 25 – the stream RTR_MOV.VRO*) and another stream is set to a second stream (*Fig. 25 – the stream stored in either RTR_STO.VRO or RTR_STA.VRO*). However, Ando does not disclose a 1-PMT partial TS (Transport Stream) having one PMT (Program Map Table) is set to the first stream.

Naimpally discloses a 1-PMT partial TS (Transport Stream) having one PMT (Program Map Table) (*Figs. 3B-D; column 7, line 26 – column 8, line 11 – the stream for program with PID P0*).

One of ordinary skill in the art at the time the invention was made would have been motivated to incorporate the 1-PMT partial TS (Transport Stream) having one PMT disclosed by Naimpally into the method disclosed by Ando so that user can select and store the stream for the program that he or she desires.

Claim 10 is rejected for the same reason as discussed in claim 9 above in further consideration of Ando also disclosing a time-map-free stream is set to a second stream (*Fig. 25 – the stream stored in either RTR_STO.VRO or RTR_STA.VRO*). However, Ando does not disclose the stream set to a second stream is 1-PMT partial TS.

Naimpally discloses a 1-PMT partial TS (Transport Stream) (*Figs. 3B-D; column 7, line 26 – column 8, line 11 – the stream for program with PID P0*).

One of ordinary skill in the art at the time the invention was made would have been motivated to incorporate the 1-PMT partial TS (Transport Stream) disclosed by Naimpally into the method disclosed by Ando so that user can select and store a second stream for another program that he or she desires as well.

Regarding claim 11, Naimpally also discloses one multi-PMT stream including a plurality of 1-PMT streams is set to a second stream (*Fig. 3A; column 7, line 26 – column 8, line 11 – each stream for each program has its own PMT in the multi-program transport stream shown in Fig. 3A*). One of ordinary skill in the art would also been motivated to incorporate recording of the multi-program transport stream into Ando and Naimpally so that all programs in the transport stream can be stored if the user desires to record all programs broadcasted.

Claim 12 is rejected for the same reason as discussed in claim 11 above.

Regarding claim 13, Ando and Naimpally also disclose a plurality of streams or a plurality of 1-PMT streams are combined into one 1-PMT stream (*Naimpally: column 6, lines 12-14 – the stream for a program is considered as a combination of three streams: video, audio, and data streams; Fig. 3A; column 7, line 26 – column 8, line 11 – each stream for each program has its own PMT in the multi-program transport stream shown in Fig. 3A*), and the stream is set to the first stream (*Ando: Fig. 25 – the stream RTR_MOV.VRO*).

Claim 14 is rejected for the same reason as discussed in claim 13 above.

Regarding claim 15, Naimpally also discloses the plurality of streams or the plurality of 1-PMT streams are partial TSs of different channels (*Fig. 3A; column 7, line*

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26 – column 8, line 11; column 9, line 66 – column 10, line 15 – each stream for each program has its own PMT in the multi-program transport stream shown in Fig. 3A - and each stream is considered belonging to a separate channel with separate data packets - each stream is considered partial in the sense of being single-program).

Regarding claim 16, Naimpally also discloses the plurality of streams or the plurality of 1-PMT streams are full TSs (*Fig. 3A; column 7, line 26 – column 8, line 11; column 9, line 66 – column 10, line 15 – each stream for each program has its own PMT in the multi-program transport stream shown in Fig. 3A - and each transport stream is considered full transport stream because they contains all video, audio, and general data as described in column 6, lines 12-14).*

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hung Q. Dang whose telephone number is (571)270-1116. The examiner can normally be reached on IFT.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, THAI Q. TRAN can be reached on 571-272-7382. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Hung Q Dang/
Examiner, Art Unit 2621

/Thai Tran/
Supervisory Patent Examiner, Art Unit 2621